- 2 -

Art Unit: 2152

In the claims:

- (currently amended) A method of managing a <u>first</u> network device, comprising:
 <u>loading an object-oriented network management application on a second network device;</u>
 <u>generating at least one command line interface command by the object-oriented application;</u>
- communicating the at least one command line interface command from the second network device to the first network device via a loopback address.

providing a command-line interface application programming interface (CLI API) compatible with a command-line interface (CLI) of the network device, the command-line interface of the network device capable of receiving one or more command-line interface commands for controlling the network device;

- receiving one or more instructions from an application configured to call one or more routines in the command line interface application programming interface; and
- the command line interface application programming interface generating at least one command line interface command in response to receiving the one or more instructions from the application, the command line interface command being compatible with the command line interface command being the network device.
- 2. (currently amended) The method of claim 1, wherein the CPL-API application is implemented as one or more object-oriented classes and the one or more routines are method calls in the one or more object-oriented classes.
- 3. (previously presented) The method of claim 2, wherein the one or more object oriented classes and the method calls are compatible with the Java object-oriented programming language.
- 4. (original) The method of claim 2, wherein the one or more object-oriented classes are selected from a set of classes including a session management class, an input-output class, a configuration class, a macro-generation class, and other classes.

- 3 **-**

Art Unit: 2152

- 5. (previously presented) The method of claim 1, wherein the at least one command-line interface command is capable of performing one or more network management operations selected from a set of operations including configuring a network device, gathering information on network interfaces on a network device, bringing a network device up or down on a network, and downloading a new image to a network device.
- 6. (previously presented) A network system having network management capabilities, comprising:

a non-application enabled network device having a command line interface (CLI) capable of controlling one or more network management features of the non-application enabled network device, a non-application enabled network device being a network device that is not able to process an application written in a high-level programming language; and

an application-enabled network device capable of executing applications that use a command-line interface application programming interface (CPI-API) to generate one or more commands compatible with the command line interface of the non-application enabled network device and transmit the one or more commands to the non-application enabled network device and transmit the one or more commands to the non-application enabled network device over a network for execution, an application-enabled network device being a network device that is able to process an application written in a high-level programming language.

- 7. (original) The network system of claim 6, wherein the application-enabled network device is capable of processing object-oriented applications compatible with the Java programming language.
- 8. (previously presented) A network system having network management capabilities, comprising:

a non-application enabled network device having a command line interface (CLI) capable of controlling one or more network management features of the non-application enabled network device;

-4-

Art Unit: 2152

an application-enabled network device capable of executing applications that use a command-line interface application programming interface (CLI-API) to generate one or more commands compatible with the CLI of the non-application enabled network device and transmitting the one or more commands to the non-application enabled network device over the network for execution; and

a remote serial command line interface (RS-CLI) device connected between the applicationenabled network device and the non-application enabled network device, the RS-CLI device capable of receiving an application over a network from the application-enabled network device, executing the application and producing commands for transmission over a serial connection connected to the non-application enabled network device,

wherein the commands are compatible with the CLI on the non-application enabled network device.

- 9. (original) The network of claim 8, wherein the RS-CLI device comprises,
 - a storage device capable of storing an instruction;
 - a network port capable of processing a network protocol stack and connected to the network;
- a serial port capable of processing a serial protocol and connected to the non-application enabled network device; and
- a processor capable of processing the instruction stored in the storage area of the RS-CLI device that at least generates a command compatible with a CLI of a network device in response to processing the instruction stored in the storage area.
- 10. (original) The RS-CLI device of claim 8, wherein the instruction stored in the storage area is from a software component selected from a set of software components including an operating system, an object-oriented component, a virtual machine, and a network protocol stack.
- 11. (cancelled)
- 12. (previously presented) A remote serial command-line interface (RS-CLI) device comprising: a storage device capable of storing an instruction;

network device;

- 5 **-**

Art Unit: 2152

a network port capable of being connected to the network and capable of processing a network protocol stack in addition to receiving the instruction;

a serial port capable of processing a serial protocol and capable of being connected to the non-application enabled network device; and

a processor capable of processing the instruction stored in the storage area of the RS-CLI device that at least generates a command compatible with a CLI of the non-application enabled network device in response to processing the instruction stored in the storage area.

13. (currently amended) A method of managing a <u>first</u> network device, comprising:

receiving, by a second network device, an application having instructions compatible with a
command-line interface application programming interface (CLI-API), the command-line
interface application programming interface being configured to work with a command-line
interface (CLI) of the <u>first</u> network device, the command-line interface of the <u>first</u> network device
capable of receiving one or more command-line interface commands for controlling the <u>first</u>

creating, by a second network device, one or more command-line interface commands capable of controlling the <u>first</u> network device in response to processing one or more of the instructions compatible with the command-line interface application programming interface;

transmitting, by a second network device, the one or more command-line interface commands created by the command-line interface application programming interface over a network to the first network device; and

processing, on the <u>first</u> network device, the one or more command-line interface commands created by the command-line interface application programming interface.

- 14. (currently amended) The method of claim 13, wherein the step of processing the CLI commands on the <u>first</u> network device including managing one or more aspects of the operation of the <u>first</u> network device.
- 15. (currently amended) The method of claim 13, further comprising:

-6-

Art Unit: 2152

providing results from the processing of the CLI commands on the <u>first</u> network device over the network and to the application.

- 16. (currently amended) The method of claim 13, wherein the application is executed on an application-enabled network device and the <u>first</u> network device is a non-application enabled network device having a CLI.
- 17. (original) The method of claim 13, wherein the application enabled network device is capable of processing Java object-oriented instructions.
- 18. (previously presented) An apparatus for managing a non-application enabled network device, a non-application enabled network device being a network device that is not able to process an application written in a high-level programming language, the apparatus comprising:

an application-enabled network device configured to receive an application having instructions compatible with a command-line interface application programming interface (CLI-API), the command-line interface application programming interface configured to work with a command-line interface (CLI) of the non-application enabled network device, an application-enabled network device being a network device that is able to process an application written in a high-level programming language;

a processor associated with the application-enabled network device, the processor configured to execute the application and thereby cause the command-line interface application programming interface to create one or more command-line interface commands wherein the one or more command-line interface commands created by the command-line interface application programming interface are capable of controlling the non-application enabled network device; and

a network interface on the application-enabled network device that transmits the one or more command-line interface commands created by the command-line interface application programming interface over a network for processing by the non-application enabled network device.

-7-

Art Unit: 2152

- 19. (original) The apparatus of claim 18, wherein the CLI commands created on the applicationenabled network device are capable of controlling one or more aspect of the operation of the nonapplication enabled network device.
- 20. (previously presented) The apparatus of claim 18, wherein the application-enabled network device receives results over the network from the processing of the CLI commands on the non-application enabled network device.
- 21. (previously presented) The apparatus of claim 18, wherein the application-enabled network device can process Java object-oriented instructions.
- 22. (previously presented) The method of claim 2, wherein the CLI-API provides an object-oriented application programming interface for the application to develop programmatic interactions with the network device.
- 23. (previously presented) The method of claim 22, wherein the programmatic interactions with the network device includes stateful applications operable to measure one or more variables on the network device and make decisions based on the one or more measured variables.